

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/560,494 D

Source: 1600

Date Processed by STIC: 6/8/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 4.2 PROGRAM ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/cbc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby,  
Room 1B03, Arlington, VA 22202

# Raw Sequence Listing Error Summary

## ERROR DETECTED

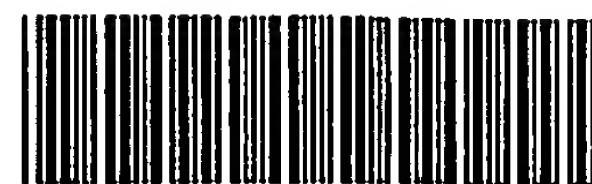
## SUGGESTED CORRECTION

SERIAL NUMBER: 09/560,494D

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length     The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII     The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length     Sequence(s)          contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)         . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)     Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence  
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
 This sequence is intentionally skipped  
  
 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)     Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence  
 <210> sequence id number  
 <400> sequence id number  
 000
- 9      Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- X      Use of <220>     Sequence(s) 32 missing the <220> "Feature" and associated numeric identifiers and responses.  
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
 (See "Federal Register," 00/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- Misuse of n/Xaa     "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

Best Available Copy



IFW16

## RAW SEQUENCE LISTING

DATE: 06/08/2004

PATENT APPLICATION: US/09/560,494D

TIME: 15:06:15

Input Set : A:\102286.413US1.txt

Output Set: N:\CRF4\06082004\I560494D.raw

4 <110> APPLICANT: Jakobsen, Brent Karsten  
 5 Gao, George Fu  
 6 Gerth, Ulrich Conrad  
 7 Sewell, Andrew Kelvin  
 9 <120> TITLE OF INVENTION: CD8 AS AN INHIBITOR OF THE CELLULAR IMMUNE SYSTEM  
 11 <130> FILE REFERENCE: 102286.413  
 13 <140> CURRENT APPLICATION NUMBER: US 09/560,494D  
 14 <141> CURRENT FILING DATE: 2000-04-28  
 16 <150> PRIOR APPLICATION NUMBER: PCT/GB98/03235  
 17 <151> PRIOR FILING DATE: 1998-10-28  
 19 <150> PRIOR APPLICATION NUMBER: GB 9722779.7  
 20 <151> PRIOR FILING DATE: 1997-10-28  
 22 <160> NUMBER OF SEQ ID NOS: 32  
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 48  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: Artificial Sequence  
 31 <220> FEATURE:  
 32 <223> OTHER INFORMATION: Synthetic DNA primer  
 34 <400> SEQUENCE: 1  
 35 gactgagtcg cggccgctgc caccatggcc ttaccagtga ccgccttg 48  
 37 <210> SEQ ID NO: 2  
 38 <211> LENGTH: 42  
 39 <212> TYPE: DNA  
 40 <213> ORGANISM: Artificial Sequence  
 42 <220> FEATURE:  
 43 <223> OTHER INFORMATION: Synthetic DNA primer  
 45 <400> SEQUENCE: 2  
 46 tattcgactg gacccctata cgtatctcgc cgaaaggctg gg 42  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 42  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Artificial Sequence  
 53 <220> FEATURE:  
 54 <223> OTHER INFORMATION: Synthetic DNA primer  
 56 <400> SEQUENCE: 3  
 57 ggaattccat atgagccagt tccgggtgtc gccgctggat cg 42  
 59 <210> SEQ ID NO: 4  
 60 <211> LENGTH: 54  
 61 <212> TYPE: DNA  
 62 <213> ORGANISM: Artificial Sequence  
 64 <220> FEATURE:

Does Not Comply  
Corrected Diskette Needed

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/560,494D

DATE: 06/08/2004

TIME: 15:06:15

Input Set : A:\102286.413US1.txt

Output Set: N:\CRF4\06082004\I560494D.raw

65 <223> OTHER INFORMATION: Synthetic DNA primer  
67 <400> SEQUENCE: 4  
68 cgcggatccc tatgcgcccc ccgctggccg gctcgcctct gggcgcaggg acag 54  
70 <210> SEQ ID NO: 5  
71 <211> LENGTH: 60  
72 <212> TYPE: DNA  
73 <213> ORGANISM: Artificial Sequence  
75 <220> FEATURE:  
76 <223> OTHER INFORMATION: Synthetic DNA primer  
78 <400> SEQUENCE: 5  
79 caccgcgaat tcggatccta agcgggtcta caagcttcgg gcttcgctgg caggaagacc 60  
82 <210> SEQ ID NO: 6  
83 <211> LENGTH: 59  
84 <212> TYPE: DNA  
85 <213> ORGANISM: Artificial Sequence  
87 <220> FEATURE:  
88 <223> OTHER INFORMATION: Synthetic DNA primer  
90 <400> SEQUENCE: 6  
91 caccgcgaat tcggatccta agcgggtcta caagcttctg gcgtcgtggg gggcttcgc 59  
93 <210> SEQ ID NO: 7  
94 <211> LENGTH: 60  
95 <212> TYPE: DNA  
96 <213> ORGANISM: Artificial Sequence  
98 <220> FEATURE:  
99 <223> OTHER INFORMATION: Synthetic DNA primer  
101 <400> SEQUENCE: 7  
102 caccgcgaat tcggatccta agcgggtcta caagcttcgg gcttcgctgg caggaagacc 60  
105 <210> SEQ ID NO: 8  
106 <211> LENGTH: 42  
107 <212> TYPE: DNA  
108 <213> ORGANISM: Artificial Sequence  
110 <220> FEATURE:  
111 <223> OTHER INFORMATION: Synthetic DNA primer  
113 <400> SEQUENCE: 8  
114 gtggcaagct tggatcctat ggcgtcgtgg tgggcttcgc tg 42  
116 <210> SEQ ID NO: 9  
117 <211> LENGTH: 42  
118 <212> TYPE: DNA  
119 <213> ORGANISM: Artificial Sequence  
121 <220> FEATURE:  
122 <223> OTHER INFORMATION: Synthetic DNA primer  
124 <400> SEQUENCE: 9  
125 ggaattccat atgagtcaat ttcgtgtatc accgctggat cg 42  
127 <210> SEQ ID NO: 10  
128 <211> LENGTH: 35  
129 <212> TYPE: DNA  
130 <213> ORGANISM: Artificial Sequence  
132 <220> FEATURE:  
133 <223> OTHER INFORMATION: Synthetic DNA primer

## RAW SEQUENCE LISTING

DATE: 06/08/2004

PATENT APPLICATION: US/09/560,494D

TIME: 15:06:15

Input Set : A:\102286.413US1.txt

Output Set: N:\CRF4\06082004\I560494D.raw

```

135 <400> SEQUENCE: 10
136 acatacccat gggctctcac tccatgaggt atttc 35
138 <210> SEQ ID NO: 11
139 <211> LENGTH: 43
140 <212> TYPE: DNA
141 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Synthetic DNA primer
146 <400> SEQUENCE: 11
147 acatacaagc ttacggctcc catcttaagg tgaggggctt ggg 43
149 <210> SEQ ID NO: 12
150 <211> LENGTH: 9
151 <212> TYPE: PRT
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: HLA-A2 Pol-restricted CTL line specific peptide
157 <400> SEQUENCE: 12
158 Ile Leu Lys Glu Pro Val His Gly Val
159 1 5
-----162 <210> SEQ ID NO: 13-----
163 <211> LENGTH: 9
164 <212> TYPE: PRT
165 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: HLA-A2 Pol-restricted CTL line specific peptide
170 <400> SEQUENCE: 13
171 Ser Leu Tyr Asn Thr Val Ala Thr Leu
172 1 5
175 <210> SEQ ID NO: 14
176 <211> LENGTH: 9
177 <212> TYPE: PRT
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: HLA-A2 Pol-restricted CTL line specific peptide
183 <400> SEQUENCE: 14
184 Val Ile Tyr Gln Tyr Met Asp Asp Leu
185 1 5
188 <210> SEQ ID NO: 15
189 <211> LENGTH: 42
190 <212> TYPE: DNA
191 <213> ORGANISM: Artificial Sequence
193 <220> FEATURE:
194 <223> OTHER INFORMATION: Synthetic DNA primer
196 <400> SEQUENCE: 15
197 ctgtccaacc cgacgtcggg cagctcgtgg ctcttccagc cg 42
199 <210> SEQ ID NO: 16
200 <211> LENGTH: 42
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence

```

## RAW SEQUENCE LISTING

DATE: 06/08/2004

PATENT APPLICATION: US/09/560,494D

TIME: 15:06:15

Input Set : A:\102286.413US1.txt

Output Set: N:\CRF4\06082004\I560494D.raw

204 &lt;220&gt; FEATURE:

205 &lt;223&gt; OTHER INFORMATION: Synthetic DNA primer

207 &lt;400&gt; SEQUENCE: 16

208 cggctggaag agccacgagc tgcccagcgt cgggttggac ag 42

210 &lt;210&gt; SEQ ID NO: 17

211 &lt;211&gt; LENGTH: 99

212 &lt;212&gt; TYPE: DNA

213 &lt;213&gt; ORGANISM: Artificial Sequence

215 &lt;220&gt; FEATURE:

216 &lt;223&gt; OTHER INFORMATION: Synthetic DNA primer

218 &lt;400&gt; SEQUENCE: 17

219 gggggaagct taatgccatt cgattttctg agcttcaaaa atatcggttca gaccaccacc 60

220 ggatcctggc gtcgtggtgg gcttcgctgg caggaagac 99

222 &lt;210&gt; SEQ ID NO: 18

223 &lt;211&gt; LENGTH: 18

224 &lt;212&gt; TYPE: PRT

225 &lt;213&gt; ORGANISM: Artificial Sequence

227 &lt;220&gt; FEATURE:

228 &lt;223&gt; OTHER INFORMATION: CD8 alpha polypeptide

--- 230 &lt;400&gt; SEQUENCE: 18

231 Gly Ser Gly Gly Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu

232 1 5 10 15

233 Trp His

237 &lt;210&gt; SEQ ID NO: 19

238 &lt;211&gt; LENGTH: 63

239 &lt;212&gt; TYPE: DNA

240 &lt;213&gt; ORGANISM: Artificial Sequence

242 &lt;220&gt; FEATURE:

243 &lt;223&gt; OTHER INFORMATION: Synthetic DNA primer

245 &lt;400&gt; SEQUENCE: 19

246 gaggaggagc atatgaaacc acaagcacct gaactacgaa tctttccaaa gaaaatggac 60

247 gcc 63

249 &lt;210&gt; SEQ ID NO: 20

250 &lt;211&gt; LENGTH: 36

251 &lt;212&gt; TYPE: DNA

252 &lt;213&gt; ORGANISM: Artificial Sequence

254 &lt;220&gt; FEATURE:

255 &lt;223&gt; OTHER INFORMATION: synthetic DNA primer

257 &lt;400&gt; SEQUENCE: 20

258 ggggagggaa gcttacttgg tagtagtaga gttcac 36

260 &lt;210&gt; SEQ ID NO: 21

261 &lt;211&gt; LENGTH: 9

262 &lt;212&gt; TYPE: PRT

263 &lt;213&gt; ORGANISM: Artificial Sequence

265 &lt;220&gt; FEATURE:

266 &lt;223&gt; OTHER INFORMATION: HLA-A2-flu

268 &lt;400&gt; SEQUENCE: 21

269 Gly Ile Leu Gly Phe Val Phe Thr Leu

270 1 5

## RAW SEQUENCE LISTING

DATE: 06/08/2004

PATENT APPLICATION: US/09/560,494D

TIME: 15:06:15

Input Set : A:\102286.413US1.txt

Output Set: N:\CRF4\06082004\I560494D.raw

273 <210> SEQ ID NO: 22  
 274 <211> LENGTH: 9  
 275 <212> TYPE: PRT  
 276 <213> ORGANISM: Artificial Sequence  
 278 <220> FEATURE:  
 279 <223> OTHER INFORMATION: peptide epitope  
 281 <400> SEQUENCE: 22  
 282 Lys Ala Val Tyr Asn Phe Ala Thr Cys  
 283 1 5  
 286 <210> SEQ ID NO: 23  
 287 <211> LENGTH: 366  
 288 <212> TYPE: DNA  
 289 <213> ORGANISM: Artificial Sequence  
 291 <220> FEATURE:  
 292 <223> OTHER INFORMATION: synthetic DNA construct encoding part of the  
 293 extracellular domain of human CD8 alpha  
 W--> 295 <221> NAME/KEY: CDS  
 296 <222> LOCATION: (1)...(366)  
 W--> 298 <400> 23  
 -----  
 299 atg agt caa ttt cgt gta tca ccg ctg gat cgg acc tgg aac ctg ggc 48  
 300 Met Ser Gln Phe Arg Val Ser Pro Leu Asp Arg Thr Trp Asn Leu Gly  
 301 1 5 10 15  
 303 gag aca gtg gag ctg aag tgc cag gtg ctg ctg tcc aac ccg acg tcg 96  
 304 Glu Thr Val Glu Leu Lys Cys Gln Val Leu Leu Ser Asn Pro Thr Ser  
 305 20 25 30  
 307 ggc tgc tcg tgg ctc ttc cag ccg cgc ggc gcc gcc gcc agt ccc acc 144  
 308 Gly Cys Ser Trp Leu Phe Gln Pro Arg Gly Ala Ala Ala Ser Pro Thr  
 309 35 40 45  
 311 ttc ctc cta tac ctc tcc caa aac aag ccc aag gcg gcc gag ggg ctg 192  
 312 Phe Leu Leu Tyr Leu Ser Gln Asn Lys Pro Lys Ala Ala Glu Gly Leu  
 313 50 55 60  
 315 gac acc cag cgg ttc tcg ggc aag agg ttg ggg gac acc ttc gtc ctc 240  
 316 Asp Thr Gln Arg Phe Ser Gly Lys Arg Leu Gly Asp Thr Phe Val Leu  
 317 65 70 75 80  
 319 acc ctg agc gac ttc cgc cga gag aac gag ggc tac tat ttc tgc tcg 288  
 320 Thr Leu Ser Asp Phe Arg Arg Glu Asn Glu Gly Tyr Tyr Phe Cys Ser  
 321 85 90 95  
 323 gcc ctg agc aac tcc atc atg tac ttc agc cac ttc gtg ccg gtc ttc 336  
 324 Ala Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe Val Pro Val Phe  
 325 100 105 110  
 327 ctg cca gcg aag ccc acc acg acg cca tag 366  
 328 Leu Pro Ala Lys Pro Thr Thr Thr Pro \*  
 329 115 120  
 332 <210> SEQ ID NO: 24  
 333 <211> LENGTH: 121  
 334 <212> TYPE: PRT  
 335 <213> ORGANISM: Artificial Sequence  
 337 <220> FEATURE:  
 338 <223> OTHER INFORMATION: an amino acid construct encoding part of the

<210> SEQ ID NO 32

<211> LENGTH: 247

<212> TYPE: PRT

<213> ORGANISM: Artificial Sequence

<220> FEATURE:

<223> OTHER INFORMATION: :

See item 11 on error  
summary report.

<400> SEQUENCE: 32

Met	Ala	Ser	Pro	Leu	Thr	Arg	Phe	Leu	Ser	Leu	Asn	Leu	Leu	Leu
1				5				10				15		
Gly	Glu	Ser	Ile	Ile	Leu	Gly	Ser	Gly	Glu	Ala	Lys	Pro	Gln	Ala
			20					25				30		Pro
Glu	Leu	Arg	Ile	Phe	Pro	Lys	Lys	Met	Asp	Ala	Glu	Leu	Gly	Gln
		35				40						45		Lys



RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/560,494D

DATE: 06/08/2004  
TIME: 15:06:16

Input Set : A:\102286.413US1.txt  
Output Set: N:\CRF4\06082004\I560494D.raw

Use of <220> Feature (NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Seq#:23,25,31,32

## VERIFICATION SUMMARY

DATE: 06/08/2004

PATENT APPLICATION: US/09/560,494D

TIME: 15:06:16

Input Set : A:\102286.413US1.txt

Output Set: N:\CRF4\06082004\I560494D.raw

L:295 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:298 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23  
L:369 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:372 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25  
L:478 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:29  
L:585 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:588 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:31  
L:659 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:32, <213>  
ORGANISM:Artificial Sequence  
L:659 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:32, <213>  
ORGANISM:Artificial Sequence  
L:659 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:32,Line#:659

---